

## **SECTION E**

### **SPECIAL PROVISIONS**

**The following Special Provisions supplement and amend the Standard Specifications for Public Works Construction (2012 edition) and the Standard Specifications of the State of California Department of Transportation (Caltrans), latest edition, as noted herein. These Special Provisions have been arranged into a format that parallels the Standard Specifications for Public Works Construction.**

## **SECTION E - SPECIAL PROVISIONS**

### **Table of Contents**

Page

#### **PART 1 - GENERAL PROVISIONS**

<b>SECTION 1 -TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS</b>	<b>1</b>
1-2 TERMS AND DEFINITIONS	
1-3 ABBREVIATIONS	
<b>SECTION 2 - SCOPE AND CONTROL OF THE WORK</b>	<b>2</b>
2-1 AWARD AND EXECUTION OF CONTRACT	
2-3 SUBCONTRACTS	
2-4 CONTRACT BONDS	
2-5 PLANS AND SPECIFICATIONS	
2-6 WORK TO BE DONE	
2-10 AUTHORITY OF THE BOARD AND THE ENGINEER	
2-11 INSPECTION	
<b>SECTION 3 - CHANGES IN WORK</b>	<b>6</b>
3-2 CHANGES INITIATED BY THE AGENCY	
3-3 EXTRA WORK	
3-4 CHANGED CONDITIONS	
<b>SECTION 4 – CONTROL OF MATERIALS</b>	<b>8</b>
4-1 MATERIALS AND WORKMANSHIP	
<b>SECTION 5 - UTILITIES</b>	<b>9</b>
5-1 LOCATION	
5-2 PROTECTION	
5-3 REMOVAL	
5-5 DELAYS	
<b>SECTION 6 - PROSECUTION, PROGRESS &amp; ACCEPTANCE OF THE WORK</b>	<b>12</b>
6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK	
6-7 TIME OF COMPLETION	
6-8 COMPLETION, ACCEPTANCE AND WARRANTY	
6-9 LIQUIDATED DAMAGES	
6-11 SEQUENCE OF CONSTRUCTION	
<b>SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR</b>	<b>15</b>
7-2 LABOR	
7-3 INSURANCE	
7-5 PERMITS	
7-6 THE CONTRACTOR'S REPRESENTATIVE	
7-8 WORK SITE MAINTENANCE	
7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS	
7-10 PUBLIC CONVENIENCE AND SAFETY	
7-15 PROJECT CONSTRUCTION SIGNS AND PORTABLE CHANGEABLE MESSAGE SIGNS	

<b>SECTION 9 - MEASUREMENT AND PAYMENT</b>	<b>27</b>
9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK	
9-2 LUMP SUM WORK	
9-3 PAYMENT	
9-4 CLAIMS	
 <b>PART 2 - CONSTRUCTION MATERIALS</b>	
 <b>SECTION 217 - MISCELLANEOUS DRAINAGE FACILITIES</b>	<b>30</b>
217-1 CURB OPENING AND GRATING CATCH BASINS	
217-2 CLEANING OF EXISTING CATCH BASINS	
217-4 AUTOMATIC RETRACTABLE SCREENS (ARS)	
217-5 FLO-GARD+ PLUS CATCH BASIN FILTER INSERTS	
 <b>SECTION 218 - SIGNS</b>	<b>38</b>
218-2 NO PARKING SIGNS	
 <b>PART 3 - CONSTRUCTION METHODS</b>	
 <b>SECTION 317 SIGNAGE</b>	<b>40</b>
317-1 ROADSIDE SIGNS	
(Supplemented with Section 56-2 of Caltrans Standard Specifications)	
56-4.03 CONSTRUCTION	
56-4.04 PAYMENT	

## **PART 1 - GENERAL PROVISIONS**

### **SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS**

#### **1-2 TERMS AND DEFINITIONS.** Add or redefine the following:

**Agency** – The City of Torrance, herein referred to as CITY.

**Board** – The City Council of the City of Torrance, herein referred to as City Council.

**Engineer** – The Public Works Director and/or City Engineer of the City of Torrance, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

**Claim** - A separate demand by the Contractor for (A) a time extension, (B) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the Agency.

**Automatic Retractable Screen (ARS)** – A screen, mounted across the curb opening of a catch basin for preventing trash and debris from entering the catch basin that opens automatically by mechanical or other means when activated by the inflow of water into the catch basin.

**Catch Basin** – A structure or device, which intercepts water runoff from surface streets and directs it into a storm drain conduit system.

**Connector Pipe** – A drain pipe constructed for the purpose of directly conveying water from a catch basin to a main line storm drain conduit.

**Curb Opening Catch Basin** – A catch basin with an opening in the curb face serving as the only means for allowing storm water to enter into the catch basin from the street (SPPWC Standard Plan Nos. 300-3 and 307-3).

**Unit** – When referring to a catch basin BMP retrofit device, a unit is an individual screen and associated mechanisms that operate independently of the other units installed in a catch basin. Catch basins with openings larger than 3.5 feet or those with existing support bolts will require multiple units to span the entire width of the catch basin opening.

#### **1-3 ABBREVIATIONS.**

##### **1-3.2 Common Usage:**

Add the following abbreviations:

Approx	Approximate
ARS	Automatic Retractable Screen
Exist.	Existing
L.A.C.D.P.W.	Los Angeles County Department of Public Works
OH	Overhead
Ped.	Pedestrian
Temp.	Temporary

## **SECTION 2 - SCOPE AND CONTROL OF THE WORK**

**2-1 AWARD AND EXECUTION OF CONTRACT.** Replace the entire subsection with the following:

Within ten (10) working days after the date of the CITY'S award of contract, the Contractor shall execute and return all Contract Documents required by the CITY. The CITY reserves the right to terminate the award if the above requirement is not met. Such termination will result in the forfeiture of the Proposal Guaranty.

The Contract shall not be considered binding upon the CITY until executed by the authorized CITY officials.

### **2-3 SUBCONTRACTS**

**2-3.2 SELF PERFORMANCE.** Replace the second sentence with the following:

The following work will be considered as "Specialty Items":

ARS Installation

**2-4 CONTRACT BONDS.** Revise the second sentence of the fourth paragraph to read as follows:

The "Performance Bond" shall remain in effect for one year following the date specified in the Notice of Completion or, if no Notice of Completion is recorded, for one year following the date of final acceptance by the Engineer.

### **2-5. PLANS AND SPECIFICATIONS.**

**2-5.1 General.** Add the following sentence to the first paragraph to read as follows:

The Contractor shall maintain a control set of Plans and Specifications on the Work site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on this control set to show as-built conditions. Upon completion of the Work, the Contractor shall submit the control set to the Engineer for approval. Final payment will not be made until this requirement is met.

Add the following subsections:

**2-5.1.1 Plans.** Included as part of the Contract Documents are the following, which show the location, character, dimensions or details of the Work:

#### **1) Project Plans**

The plans and data are provided for information only. The Owner does not guarantee their accuracy and correctness. If the Bidder in preparing the Bid Proposal uses this information, the Bidder assumes all risks resulting from conditions differing from the information shown. The Bidder, in consideration for the information being provided, hereby releases the Owner and Consulting Engineer from any responsibility of obligation as to the accuracy of such information or for any additional compensation for work performed due to assumptions based on the use of such information.

#### **2) Standard Plans**

- a. City of Torrance Standard Plans, latest edition
- b. Standard Plans of the Los Angeles County Department of Public Works, latest edition

Applicable Standard Plans and information for this project are included in the Appendices of these Specifications.

**2-5.1.2 Specifications.** The Work shall be performed or executed in accordance with these Special Provisions and the following:

- 1) Standard Specifications for Public Works Construction, 2012 edition and supplements thereto, hereinafter referred to as the Standard Specifications, as written and promulgated by Public Works Standards, Inc. The Standard Specifications are published by BNi Building News, Inc., 1612 South Clementine Street, Anaheim, CA 92802, Phone: (800) 873-6397.
- 2) Sections 56-2, 84, 85, and 86 of the State of California Department of Transportation (Caltrans) Standard Specifications, latest edition

**2-5.2 Precedence of Contract Documents.** Replace the entire subsection with the following:

If there is a conflict between any of the Contract Documents, the document highest in precedence shall control. The order of precedence shall be as follows:

- 1) Permits issued by other agencies.
- 2) Change Orders (including Plans and Specifications attached thereto).
- 3) Public Works Agreement
- 4) Addenda
- 5) Special and General Provisions
- 6) Plans
- 7) City Standard Plans
- 8) Other Standard Plans
- 9) Standard Specifications for Public Works Construction
- 10) Reference Specifications

With reference to the Plans/Drawings, the order of precedence is as follows:

- 1) Change Order plans govern over Addenda and Contract plans
- 2) Addenda plans govern over Contract plans
- 3) Contract plans govern over standard plans
- 4) Detail plans govern over general plans
- 5) Figures govern over scaled dimensions

Within the Specifications, the order of precedence is as follows:

- 1) Change Orders
- 2) Permits from other agencies/Supplemental Agreements
- 3) Special Provisions
- 4) Instruction to Bidders
- 5) Referenced Standard Plans
- 6) Referenced Standard Specifications

If the Contractor, in the course of the Work, becomes aware of any claimed errors or omissions in the Contract Documents or in the CITY's fieldwork, the Contractor shall immediately inform the Engineer. The Engineer shall promptly review the matter, and if the Engineer finds an error or omission has been made the Engineer shall determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the Contract, the CITY shall issue an appropriate Change Order in accordance with 3-3. After discovery of an error or omission by the Contractor, any related work performed by the Contractor shall be done at the Contractor's risk unless authorized by the Engineer.

### **2-5.3 Submittals**

#### **2-5.3.2 Working Drawings.** Add the following:

Shop drawings are required for ARS installed in Los Angeles County Flood Control District catch basins pursuant to APPENDIX III: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS, ARS STANDARDS AND PERMIT APPLICATION.

#### **2-5.3.4 Supporting Information.** Replace the second paragraph with the following:

Submittals are required for the following:

- 1) Construction schedule per 6-1.
- 2) Automatic Retractable Screens data spreadsheet required for Los Angeles County Department of Public Works Permit.
- 3) Information Sign Brackets, Posts and Foundations
- 4) Confined Space Entry Program per 7-10.4.5.1
- 5) Onsite Testing procedures for ARS unit required for Los Angeles County Department of Public Works Permit.
- 6) Door hanger for resident notifications.

In addition to the above, submittals may be required for any product, manufactured item, or system not specifically listed above.

### **2-6 WORK TO BE DONE.** Add the following:

The Work consists of the installation of Automatic Retractable Screens for City and Los Angeles County Flood Control District (LACFCD) catch basins, obtaining a Los Angeles County Department of Public Works Permit and Testing for LACFCD ARS installations, weekly reports on sign installations, placement of door hangers for advance notifications for sign installations and installation of Street Sweeping "No Parking" signs as needed as shown in these Contract Documents.

### **2-10 AUTHORITY OF THE BOARD AND THE ENGINEER.** Add the following:

Failure of the Contractor to comply with the requirements of the Contract Documents, or to follow the directions of the Engineer, and/or to immediately remedy such noncompliance or to follow directions, may, upon notice from the Engineer, result in the suspension of the Contract monthly progress payments. Any monthly progress payments so suspended may remain in suspension until the Contractor is in compliance with the Contract Documents and the directions of the Engineer, as determined by the Engineer.

**2-11 INSPECTION.** Replace the entire subsection with the following:

The Work is subject to inspection and approval by the Engineer. The Contractor shall notify the Engineer a minimum of 48 hours in advance of the required inspection.

The Engineer will make, or have made, such inspections and tests as he deems necessary to see that the Work is in conformance with the Contract Documents. In the event such inspections or tests reveal noncompliance with the Contract Documents, the Contractor shall bear the cost of such corrective measures as deemed necessary by the Engineer, as well as the cost of subsequent re-inspection and re-testing.

Work done in the absence of inspection by the Engineer may be required to be removed and replaced under the inspection of the Engineer, and the entire cost of removal and replacement, including the cost of all materials which may be furnished by the CITY and used in the work thus removed, shall be borne by the Contractor, regardless of whether the work removed is found to be defective or not. Work covered without the approval of the Engineer shall, if so directed by the Engineer, be uncovered to the extent required by the Engineer, and the Contractor shall similarly bear the entire cost of performing all the work and furnishing all the materials necessary for the removal of the covering and its subsequent replacement, including all costs for additional inspection.

The Engineer and any authorized representatives shall at all times have access to the Work during its construction at shops and yards as well as the Work site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with the Contract Documents.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract.

Add the following subsections:

**2-11.1 Special Inspection Fees.** If the Contractor elects to work under this Contract more than 8 hours/day or more than 40 hours/week, Saturday, Sunday, or CITY holidays, the Contractor shall arrange with the Engineer for the required inspection service and pay the Special Inspection Fees which will be charged at the following rates:

Mondays through Fridays	- \$135.00 per hour
Saturdays, Sundays, Holidays	- \$1,200.00 per day

Fees may be deducted from payments due to the Contractor at the discretion of the Engineer.

If the Contractor works under this contract at times other than within the allowed working hours without permission from or prior arrangement with the Engineer, the Contractor will be charged a lump sum amount of \$500.00 for each occurrence, in addition to the above fees. The amount will be deducted from a Progress Payment.

**2-11.3 Inspections During Construction.** During the construction, the Contractor shall make the Work site available for periodic inspections by the regulatory agencies. These agencies may include: Los Angeles Regional Water Quality Control Board, the State Water Resources Control Board, Los Angeles County Department of Public Works.

**2-11.4 Material Inspection/Testing and other City Expenses.**

(a) If a City subcontractor hired to perform material inspection and/or testing is required to



work additional time to perform inspection and testing as a result of an action or delay caused by the Contractor, except for specific work allowed by the Engineer, the City subcontractor may charge the City an additional fee. The Engineer may deduct the additional fee for said inspection and testing from a Progress Payment to the Contractor. The Engineer also may deduct the cost to perform additional testing when an initial test fails to meet the requirements of this Contract. The typical rates for material testing and inspection are available upon request from the Public Works Department.

- (b) If the Contractor does not comply with a requirement of these Special Provisions or if it does not immediately respond, after being informed, to a request by the Engineer to amend a site condition that jeopardizes the public health, safety or welfare, the Engineer may direct City staff to perform the work. For each occurrence, the City will charge the Contractor a base charge in the amount of \$750 in addition to all costs incurred by the City for administration, labor, equipment and materials. The standard rates for City staff are available upon request from the Public Works Department.
- (c) For each sign, drum, delineator, cone, barricade, warning device, or other type of required traffic control device that is not provided and/or replaced by the Contractor when required by the Traffic Control Plans and/or directed by the Engineer, the Engineer may deduct \$75 per day for each missing device from a Progress Payment.
- (d) Temporary lane closures maintained prior to 8:30 A.M. and/or after 3:30 P.M. may have a negative economic effect on the local residential, commercial or industrial community. Unless a temporary lane closure is otherwise authorized, the Engineer may deduct a fee from a Progress Payment for each temporary lane closure maintained prior to 8:30 A.M. or after 3:30 P.M. The fee will be assessed at a rate of \$700 per each travel lane per each thirty (30) minute interval, or fraction thereof.

## **SECTION 3 – CHANGES IN WORK**

### **3-2 CHANGES INITIATED BY THE AGENCY**

**Section 3-2.2.1 General.** Delete this subsection in its entirety. Add the following:

The City reserves the right to increase or decrease any bid item quantity, as necessary, to meet the City's needs and/or the project and/or budget requirements. If the City increases or decreases any bid item quantity by more than 25% of the original contract quantity, either the City or the Contractor may initiate discussions and/or negotiations regarding a potential adjustment to the contract unit bid price.

**Section 3-2.2.2. Increases of More Than 25%.** Delete this subsection in its entirety.

**Section 3-2.2.3. Decreases of More Than 25%.** Delete this subsection in its entirety.

Add the following subsection:

**3-2.6 Allowances.** The Agency may establish an allowance in the Bid for items in which there is insufficient information for the Contractor to submit a Contract Unit Price or for which a basis of bidding may not be established for any reason.

The Contractor shall submit to the Engineer an estimate for each element to be furnished or

provided under the bid item for which an allowance has been established.

Upon approval of the estimate, the Contractor will be reimbursed for its actual costs plus the specified markup, if any, upon presentation to the Engineer or original, itemized invoices. The Contractor shall not be entitled to full payment for the amount of the allowance should it not be utilized. Should the Contractor's actual costs exceed the allowance, the difference will be considered as Extra Work in accordance with 3-3.

The Agency has established an allowance to repair damaged catch basins. Payment for repair of damaged catch basins will be made on the basis of "Extra Work" per 3-3 of the Additions and Amendments. Payment will be made under the item in the Contract Lump Sum bid item for "RECONSTRUCTION OF LOCAL DEPRESSION FOR CATCH BASIN ARS (ALLOWANCE OF \$10,000)."

### **3-3 EXTRA WORK**

#### **3-3.1 General.** Add the following:

Payment for additional work and all expenditures in excess of the Contract Price must be authorized in writing by the Engineer. Such authorization shall be obtained by the Contractor prior to engaging in additional work. It shall be the Contractor's sole responsibility to obtain written approval from the Engineer for any change(s) in material or in the work proposed by suppliers or subcontractors. No payment shall be made to the Contractor for additional work which has not been approved in writing, and the Contractor hereby agrees that it shall have no right to additional compensation for any work not so authorized.

The Contractor shall be responsible to provide all data and to obtain all approvals required by the Specifications, including submittal of Daily Extra Work Reports. No claims or extras shall be approved by the Engineer unless all work was done under the direction of and subject to the approval of the Engineer. Disputed work claims shall comply with 3-3 as modified herein.

#### **3-3.2.2 Basis for Establishing Costs.**

##### **3-3.2.2.3 Tool and Equipment Rental.** Replace the second paragraph of with the following:

The Contractor will be paid for the use of equipment at the lower of the actual rental rates paid by the Contractor or the rental rates listed for such equipment in either the "Rental Rate Blue Book" published by Dataquest, Inc., 1290 Ridder Park Drive, San Jose, California 95131; telephone (408) 971-9000 or the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rates" available at the Caltrans web site, [www.dot.ca.gov/hq/eqsc/inforesources.htm](http://www.dot.ca.gov/hq/eqsc/inforesources.htm), which is in effect on the date upon which the work is accomplished, and that hereby is made a part of the Contract, regardless of ownership or any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, a suitable rental rate will be established by the Engineer. The Contractor may furnish any cost data that might assist the Engineer in the establishment of such rental rate.

##### **3-3.2.3 Markup.** Add the following:

The markups mentioned hereinafter shall include, but are not limited to, all costs for the services of superintendents, project managers, timekeepers and other personnel not working directly on the change order, and pickup or yard trucks used by the above personnel. These costs shall not be

reported as labor or equipment elsewhere except when actually performing work directly on the change order and then shall only be reported at the labor classification of the work performed.

**3-3.2.3.1 Work by Contractor.** Replace the entire subsection with the following:

The following percentages shall be added to the Contractor's costs and shall constitute the mark-up for all overhead and profit, which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Subsections 3-3.2.2.1, 3-3.2.2.2, and 3-3.2.2.3.

Labor	20
Materials	15
Equipment Rental	15
Other Expenditures	15

To the sum of the costs and markups provided for in this subsection, one (1) percent shall be added as compensation for bonding.

**3-3.2.3.2 Work by Subcontractor.** Replace the entire subsection with the following:

When any part of the extra work is performed by a subcontractor, the markup established in 3-3.2.3.1 shall be applied to the subcontractor's actual cost of such work. A markup of ten (10) percent on the first \$5,000 of the subcontracted portion of the extra work and a mark-up of 5 percent on work added in excess of \$5,000 of the subcontracted portion of the extra work may be added by the Contractor.

The markups specified in the two subsections above shall be considered as including, but not limited to, the Contractor's labor costs for personnel not working directly on the extra work, including the cost of any tools and equipment that they may use. Such costs shall not be reported as labor or equipment costs elsewhere except when they are actually used in the performance of the extra work. Labor costs shall in that case be reported for the labor classification corresponding to the type and nature of extra work performed.

## **SECTION 4 – CONTROL OF MATERIALS**

### **4-1 MATERIALS AND WORKMANSHIP.**

#### **4-1.1 General.**

Add the following paragraph after the second paragraph:

If the work, or any portion thereof, shall be damaged in any way, or if any defective materials or faulty workmanship shall be discovered at any time prior to the final payment, the Contractor shall forthwith, at its own cost and expense, repair said damage, or replace such defective materials, or remedy such faulty workmanship in a manner satisfactory to the Engineer.

#### **4-1.2 Protection of Work and Materials.** Add the following:

The Contractor shall assume all risks and expense of interference and delay in his operations, and the protection from or the repair of damage to improvements being built under the contract, as may be caused by vandalism, water of whatever quantity from floods, storms, industrial waste, irrigation, underground or other sources. However, the Contractor shall be entitled to an extension of time in accordance with the provisions of Subsection 6-6. The Contractor shall also assume full

responsibility and expense of protecting, or removing and returning to the site of Work, all equipment or materials under his care endangered by any action of the elements.

Furthermore, the Contractor shall indemnify and hold the City harmless from all claims or suits for damages arising from his operations in dewatering the Work and control of water.

## **SECTION 5 – UTILITIES**

### **5-1 LOCATION.** Add the following:

The Contractor shall provide coordination with all the utility companies involved and shall provide protection from damage to their facilities. The Contractor shall be responsible for repair or replacement to said facilities made necessary by its failure to provide required protection. The Contractor is required to include utility requirements in the Construction Schedule per Section 6-1.

The Contractor shall utilize the services of "Underground Service Alert-Southern California" (USA) for utility locating in all public right-of-ways by calling 1-800-227-2600 at least 48 hours prior to any excavation. USA marking shall be limited to 6' x 6' area at each new post location.

Underground lines that are potentially hazardous such as oil company lines, natural gas mains, and electrical conduits will be carefully located by the owner as provided in the Standard Specifications. The Contractor shall take special precautions in determining the precise location and depth of these structures to insure that they will not be damaged by its operations.

Substitute the following for the last paragraph:

Prior to starting construction, the Contractor shall be responsible to determine the location and depth of all utilities which have been marked by the respective owners and which may affect or be affected by its operations. The Contractor also shall determine the location and depth of each service connection, whether or not marked. Full compensation for such work shall be considered as included in the prices bid for other items or work. If a utility which was marked or a service connection is found to interfere with the work after construction has commenced, the Contractor shall be solely responsible for all costs of any delay and for any costs which could have been avoided if the Contractor had located the utility prior to start of construction.

### **5-2 PROTECTION.** Add the following:

If, in the course of construction, the Contractor damages a sewer lateral or water lateral, the Contractor shall be responsible to completely expose said lateral from the main line to the point of connection at private property to verify integrity of all joints to the satisfaction of the Engineer. This shall not be considered to be extra work and no extra costs shall be allowed therefor.

Sewers, including lateral repairs, shall be constructed of Vitrified Clay Pipe, unless otherwise approved in writing by the Engineer.

Add the following after the final paragraph:

As noted in subsections 5-2.1, 5-2.2 and 5-2.3 utilities are classified and are to be handled in one of three ways by the Contractor in the course of performing the contract.

Add the following subsections:

### **5-2.1 Noninterfering Utilities**

Utilities that are not abandoned by the owner and do not physically interfere with the permanent work in its final location shall be supported, protected and maintained in place by the Contractor, and the Contractor shall be solely responsible for any damage, loss or injury, or death resulting from his/her failure to do so and the Contractor shall indemnify and hold harmless the City from any and all such consequences. Noninterfering utilities may, with the permission of the owner and the Public Works Director, be relocated still farther from the permanent work in its final locations, but the Contractor shall not so consider, in submitting his bid, unless the relocation is shown on the plans.

### **5-2.2 Abandoned Utilities**

Abandoned utilities are those portions of any utility which are no longer needed or desired by the owner and whose destruction is consented to by the owner and/or is permitted by notation on the plans. Abandoned utilities which physically interfere with the permanent work or with the construction thereof shall be removed by the Contractor and the Contractor shall be solely responsible for any damage, loss or injury, or death resulting from the removal and the Contractor shall indemnify and hold harmless the City from any and all such consequences.

### **5-2.3 Interfering Utilities**

Any utility shall be deemed an interfering utility (1) which physically occupies any part of the space to be occupied by the permanent work in its final locations, or (2) whose length within the theoretical width of excavation for the permanent work exceeds five times the width of said theoretical excavation whether or not the utility physically interferes with the permanent work. The Contractor shall notify Engineer of utilities that conflict with sign post installation and provide two (2) working days for Engineer to select alternative location.

The Contractor shall exercise caution to prevent damage to or movement of the utilities while constructing the permanent work along and adjacent to the utilities.

**5-2.4 Protection of Underground Hazardous Utilities.** This Subsection shall apply to projects where there are underground utilities within the Work area which may be potentially hazardous if damaged. A hazardous substance shall be defined as one having the potential for an immediate disaster such as, but not limited to, gasoline, electricity, fuel oil, butane, propane, natural gas, chlorine or other chemicals.

Abandoned or inoperative utilities designed to carry hazardous substances and unidentified or unknown utilities shall be considered hazardous until determined otherwise. Whenever the Contractor is directed by the Engineer to tap these lines, the Contractor shall provide personnel specialized in this work and payment therefore will be considered as extra work per 3-3 of these Special Provisions.

The Contractor shall comply with the following requirements when working around underground hazardous utilities:

- 1) The Contractor shall not trench or excavate within the area where a utility known to carry a hazardous substance exists until its location has been determined by excavation or other proven methods acceptable to the Engineer. The intervals between exploratory excavations or location points shall be sufficient to determine the exact location of the line. Unless otherwise directed by the Engineer, excavation for underground hazardous utilities shall be performed by the Contractor and paid for as specified per 5-1 of these Special Provisions.

- 2) If it is determined that the horizontal or vertical clearance between the utility known to carry hazardous substances and the construction limit is less than 300 mm (12 inches) (450mm (18 inches) if scarifying), the Contractor shall confer with its owner. Unless the owner elects to relocate the line or take it out of service, the Contractor shall not excavate until the line has been completely exposed within the limits of construction.
- 3) Once the physical location of the utility known to carry hazardous substances has been determined, the Contractor, in cooperation with and with the concurrence of the utility owner, shall determine how to protect and/or support the utility from damage before proceeding with the Work.
- 4) During all excavation and trenching operations, the Contractor shall exercise extreme caution and protect the utilities from damage.
- 5) The Contractor shall notify the Engineer, the public agency maintaining records for the jurisdiction in which the Project is located and the owner, if known, whenever previously unidentified or unknown underground utilities are encountered so that the location can be accurately established and made a part of permanent substructure records.

Full compensation for protecting underground hazardous utilities as specified or noted on the Plans shall be considered as included in the prices bid for the various items of work.

### **5-3 REMOVAL.**

Add the following:

It shall be the Contractor's responsibility irrespective of the notations on the plans to confirm or determine that a utility is to be abandoned before treating the same as an abandoned utility and shall assume all risks in so determining.

### **5-5 DELAYS.** Substitute the following:

If the contractor while performing the contract discovers utility facilities not identified by the public agency in the contract plans or specifications, he shall immediately notify the City and utility in writing. The Contractor shall not be entitled to damage or additional payment, nor shall it be entitled to standby time for labor if a delay does occur. The Contractor also shall not be entitled to damage or additional payment for equipment not on the project during the occurrence of the event that caused the related delay. The Engineer will determine the extent of the delay attributable to such interferences, the affect of the delay on the project as a whole, and any commensurate extension of time.

Any failure of the City and/or utility company to accomplish relocations in a reasonable manner in light of the Contractor's operations (to the extent such operations would otherwise be feasible and in accordance with the contract and as disclosed to the City prior to the Contractor encountering any such utility) shall entitle the Contractor to an extension of contract time to the extent that, in the judgment of the Engineer, the Contractor's completion of the overall contract work has been delayed; however, the Contractor shall be entitled to no other remedy and, in submitting its bid, thereby waives such other remedies, if any, unless the relocation delay is the result of arbitrary, capricious or malicious conduct by the City.

## **SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK**

### **6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.**

#### **6-1.1 Construction Schedule.** Replace the entire subsection with the following:

Within ten (10) working days after the date of the CITY's execution of the Contract, the Contractor shall submit a proposed construction schedule to the Engineer for approval. The schedule shall be in accordance with 6-1.3 and 6-1.4 and shall be in sufficient detail to show chronological relationship of all activities of the Work. These include, but are not limited to: estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, submittal of shop drawings to the Los Angeles County Flood Control District for approval and permitting, procurement of materials and scheduling of equipment.

Prior to issuing the Notice to Proceed, the Engineer will schedule a Pre-Construction Meeting with the Contractor to review the proposed construction schedule and delivery dates, arrange utility coordination and clarify inspection procedures.

Prior to starting any Work, the Contractor may be required to attend a Community Meeting to be scheduled by the Engineer. The meeting, to be held in the evening, will address the residents' questions and concerns regarding the Work, what can be expected during construction and vehicular and pedestrian access that may be temporarily restricted during construction. Compensation for attending these meetings shall be considered a part of Mobilization or, when there is no bid item for Mobilization, shall be considered as part of the bid items of work for this contract.

One week prior to starting sign installations on a street the Contractor will be required to place notification door hangers at every residence with a description of work to be completed, approximate schedule, and City contact information.

Each week the Contractor is required to provide an exhibit showing locations where No Parking signs were installed the previous week and where No Parking signs are proposed to be installed the next week. The City will provide \*.pdf files of the City for this purpose.

Notwithstanding any other provisions of the Contract, the Contractor shall not be obligated to perform any work and the CITY shall not be obligated to accept or pay for any work performed by the Contractor prior to delivery of a Notice to Proceed. The CITY's knowledge of work being performed prior to delivery of the Notice to Proceed shall not obligate the CITY to accept or pay for such work. The Contractor shall provide all required Contract bonds and evidences of insurance prior to commencing work at the site.

#### **6-1.2 Commencement of the Work.** Delete the subsection in its entirety. Add the following subsections:

#### **6-1.3 Criteria.** The construction schedule shall conform to the following criteria:

- 1) The schedule shall be prepared using the latest version of Primavera, Microsoft Project or approved equal.
- 2) Work activities shall be based on the items of work per 2-6, and the following:
  - a) Contract Unit Price items shall be subdivided into those portions to be constructed during each stage or phase of construction.

- b) Lump sum items shall be subdivided into those portions to be constructed during each stage or phase of construction.
  - c) Installation of ARS units installed in Los Angeles Flood Control District-owned catch basins can only proceed after all installations are permitted by the Los Angeles County Department of Public Works
  - d) Installation of ARS units owned by the City and those owned by the Los Angeles County Flood Control District may be scheduled independent of each other.
- 3) Required submittals, working and shop drawings shall be included as activities.
  - 4) The procurement of construction materials and equipment with long lead times for deliveries shall be included as activities.
  - 5) Work to be performed by subcontractors shall be identified and shown as work activities.
  - 6) Start and completion dates of each activity shall be illustrated.
  - 7) Completion of all Work under the Contract shall be within the time specified in 6-7 of these Special Provisions and in accordance with the Plans and Specifications.

**6-1.4 Requirements.** In preparing the construction schedule, the following items shall be considered:

Sequence of Construction - The Contractor shall sequence the Work in a manner to expeditiously complete the project with a minimum of inconvenience to the adjacent owners and to conform to the following:

- 1. Cleaning Catch Basins – The Contractor shall clean each catch basin that will have an ARS installed and install BMPs to keep debris from entering storm drain pipes.
  - 2. Debris removal - All debris removed shall be hauled off the Work site no later than the same day that the removal is performed. If the calendar day following the removal is a non-working day (Saturday, etc.) the concrete shall be hauled off the Work site on the same day it was removed. Unless otherwise authorized by the Engineer, failure by the Contractor to haul concrete from the Work site and/or Contractor's storage yard(s) in a timely manner may result in a liquidated damage assessed upon the Contractor. Such liquidated damage shall be determined by the Engineer and will be deducted, accordingly, from a Progress Payment due to the Contractor.
  - 3. USA markings and placement of notification door hangers.
  - 4. Irrigation Systems – Irrigation systems disrupted by the Contractor shall not be left inoperable for more than three working days.
  - 5. Subsection 307-1.3 regarding the ordering of materials.
  - 6. All Work shall be performed between the hours of 8:00 a.m. and 4:30 p.m. on non-holiday weekdays unless otherwise approved by the Engineer.
- 6.1 A temporary lane closure, if needed on arterial or collector streets, shall only be permitted between the hours of 9:00 a.m. and 3:30 a.m. on non-holiday weekdays unless approved by the Engineer. Arterial and collector streets are defined in the



2009 Torrance General Plan, Chapter 2, Circulation and Infrastructure Element  
available at the following internet address:  
[https://www.torranceca.gov/PDF/2\\_Circulation\\_Infrastructure\\_Element.pdf](https://www.torranceca.gov/PDF/2_Circulation_Infrastructure_Element.pdf)

7. A move-in period of 10 calendar days will be allowed starting on the date in the Notice to Proceed.
8. Holiday Moratorium per 7-10.2.8 of these Special Provisions.
9. Stockpile area – Schedule shall indicate date for clean-up of stockpile area.

Should the Contractor fail to meet Requirements Nos. 1-9, the Engineer reserves the right to prohibit the Contractor from making further removals until the clean up, construction, or rehabilitation of sprinklers is in conformance with the aforementioned requirements. Furthermore, if after notice is given to the Contractor to perform work to meet these requirements, and the Contractor refuses or for any reason fails to perform sufficiently to meet these schedules, CITY may perform said work and charge the Contractor for all costs incurred.

**6-1.5 Updates.** The Contractor shall submit 2 paper copies of the updated construction schedule to the Engineer on the first working day of each month.

If the Contractor decides to make a major change in the method of operations after commencing construction, or if the schedule fails to reflect the actual progress, the Contractor shall submit to the Engineer a revised construction schedule in advance of beginning revised operations.

## **6-7 TIME OF COMPLETION.**

**6-7.1 General.** Replace the first sentence with the following:

Time shall be of the essence in the Contract. The Contractor shall begin Work after the mailing by the Engineer to the Contractor, first class mail, postage prepaid, a Notice to Proceed and shall diligently prosecute the same to completion within **180** working days from the start date specified in the Notice to Proceed.

## **6-8 COMPLETION, ACCEPTANCE AND WARRANTY.**

**6-8.1 Completion.** Replace the entire subsection with the following:

If, in the Engineer's judgment, the Work has been completed and is ready for acceptance, the Engineer will so certify and will determine the date when the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect the Work. The Engineer may cause a Notice of Completion to be filed and recorded with the Los Angeles County Recorder's Office. At the Engineer's option, the Engineer may certify acceptance to the City Council who may then cause a Notice of Completion to be filed and recorded with the Los Angeles County Recorder's Office.

**6-8.3 Warranty.** Add the following subsection:

**6-8.3.1 Manufacturer's Warranties.** Manufacturer's warranties shall not relieve the Contractor of liability under these Specifications. Such warranties only shall supplement the Contractor's responsibility. The Engineer may, at his option, require a manufacturer's warranty on any product offered for use.

**6-9 LIQUIDATED DAMAGES.** In each of the two paragraphs, substitute "\$500 in place of "\$250" as the amount of the liquidated damages per each consecutive calendar day.

Add the following section:

## **6-11 SEQUENCE OF CONSTRUCTION**

**6-11.1 Multiple Headings.** In order to meet the contract schedule, the Contractor will be allowed to initiate and maintain two or more construction headings. However, the Contractor will not be allowed to have multiple phases of work occurring that have the corresponding traffic control devices in conflict with each other.

## **SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR**

### **7-2 LABOR**

#### **7-2.2 Laws** Add the following first paragraph:

The City and Contractor acknowledge that this project is public work to which prevailing wages apply. The Terms for Compliance with California Labor Law requirements is attached hereto and incorporated herein by this reference.

#### **7-2.3 Payroll Records.** Add the following:

Any payroll and payroll records required for this project shall be submitted, for each week in which any contract work is performed, to the Engineer. A retention of \$5,000 per report per pay period will be withheld from a progress payment for a late or missing report. A report shall be deemed as late or missing when not submitted to the Engineer within 10 calendar days from the close of the pay period for which the report applies. In addition, a non-refundable deduction of \$100 per report per day will be deducted from payments due the Contractor for each late or missing report. The \$100 non-refundable deduction per day will be incurred beginning on the first day the report is late or missing.

Add the following subsections:

#### **7-2.5 Subcontractor and DBE Records**

At the completion of the contract if the Contractor does not submit its Subcontractor and DBE Records to the Engineer a retention in the amount of \$10,000 per record will be withheld from a progress payment for a late or missing record. A record shall be deemed as late or missing when not submitted to the Engineer within 15 calendar days from the completion of the contract. In addition, a non-refundable deduction of \$300 per record per day will be deducted from payments due the Contractor for each late or missing record. The \$300 non-refundable deduction per day will be incurred beginning on the first day the record is late or missing.

#### **7-2.6 Department of Industrial Relations' monitoring and enforcement of prevailing wage laws**

California Labor Code:

1771.1. (a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the

performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

SB 854 amended the Labor Code to require all contractors bidding on public work to register with the Department of Industrial Relations (DIR) and to pay an annual fee. The registration requires contractors to provide the State with evidence of the contractors' compliance with a number of statutory requirements. The registration requirement took effect on July 1, 2014 to fund the Department of Industrial Relations' monitoring and enforcement of prevailing wage laws. The registration period is open now, and contractors and subcontractors wishing to work on a public works project must be registered by March 1, 2015. For public agencies/awarding bodies, the new law requires that all public works projects with bids due after March 1, 2015, or awarded on or after April 1, 2015, use only registered contractors and subcontractors. The bill also requires awarding bodies to include notice of the registration requirement in their bid invitations and bid documents. In addition, public agencies must also file notice of their public works projects using DIR approved forms.

Registration is completed through an online application and requires a non-refundable \$300 fee to be paid by the contractors and subcontractors. The registration process requires contractors to:

- provide workers' compensation coverage to its employees
- hold a valid Contractors State License Board license
- have no delinquent unpaid wage or penalty assessments
- not be subject to federal or state debarment

Contractors must pay an annual renewal fee by July 1 of each year. The registration form is located on the DIR's website at <http://www.dir.ca.gov/DLSE/dlsepublicworks.html>.

To help awarding bodies and contractors comply with the new requirements, the DIR will post a database of registered contractors and subcontractors on its website. While non-registered contractors may not be awarded public works contracts after the effective date, inadvertently listing an unregistered subcontractor on a bid will not necessarily invalidate that bid. In addition, the registration requirement does not apply to private jobs that are determined to be public works after the contract has been awarded.

The City is required to provide notice of award to the DIR on all projects. Said notice is by an online application and within five (5) days of project award. The online application is at: <https://www.dir.ca.gov/pwc100ext/>

### **7-3 INSURANCE.**

**7-3.2 General Liability Insurance.** Replace the second sentence of the second paragraph with the following:

The Contractor must maintain at its sole expense the following insurance, which will be full coverage not subject to self-insurance provisions:

- 1) Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:
  - a). Combined single limits of \$2,000,000 per occurrence.
- 2) General Liability including coverage for premises, products and completed operations, independent contractors, personal injury and contractual obligations with combined single limits of coverage of at least \$3,000,000 per occurrence, with an annual aggregate of no less than \$5,000,000.

Add the following:

The Contractor must include all subcontractors as insureds under its policies or must furnish separate certificates and endorsements for each subcontractor.

**7-3.3 Worker's Compensation Insurance.** Add the following after the fourth paragraph:

Worker's Compensation Insurance shall be with limits as required by the State of California and Employer's Liability with limits of at least \$1,000,000.

**7-3.4 Auto Liability Insurance** Delete subsection in its entirety.

**7-4 ADVANCED NOTIFICATIONS**

The contractor is required to distribute 1-week advanced notifications to residents for installation of No Parking for Street Sweeping signs. The contractor shall provide and deliver advance notification in the form of door hangers at each residence notifying residents of proposed times for parking prohibition and approximate date of sign installation, beginning of enforcement and contact information. The City will provide the original notice for the Contractor's use. The door hangers must be delivered a minimum of one week before sign installation. The contractor must also provide weekly updates to the City identifying areas where notifications will be placed the next week, and where signs were installed the previous week. The City will provide .pdf files of City Street maps for this purpose. Full compensation for complying with the above requirements shall be considered as included in the lump sum price for MOBILIZATION.

**7-5 PERMITS.** Replace the second paragraph with the following:

The Contractor shall obtain a City of Torrance Business License, and a no-fee Construction Excavation Permit before commencing construction. Additionally, the Contractor shall submit drawings and obtain Los Angeles County Department of Public Works permit, pay required fees, and arrange inspections before installation of units in Los Angeles County Flood Control District catch basins. The Contractor shall obtain a Caltrans Encroachment Permit, pay required fees and arrange inspections before commencing construction on installations in catch basins within Caltrans Right of Way. The Contractor shall also obtain any and all other permits, licenses, inspections, certificates, or authorizations required by any governing body or entity.

Full compensation for complying with the above requirements shall be considered as included in the lump sum price for "TRAFFIC CONTROL / PERMITS" and "LA COUNTY PERMIT AND TESTING".

Unless otherwise authorized by the CalTrans Encroachment Permit, all work within Caltrans Right-of-Way shall be performed in accordance with the latest State of California Department of Transportation Standard Specifications and said permit.

## 7-6 THE CONTRACTOR'S REPRESENTATIVE

Add a third paragraph to the section stating the following:

The Contractor's Representative shall be approved by the CITY prior to the start of the Work. If the designated representative is rejected, the Contractor shall immediately designate another representative in writing and submit to the City for consideration. The CITY shall have the authority to require the Contractor to remove its representative and/or alternate representative at any time and at no cost to the CITY.

## 7-8 WORK SITE MAINTENANCE.

### 7-8.6 Water Pollution Control.

**7-8.6.2 Best Management Practices (BMPs).** Replace the entire subsection with the following:

Best Management Practices shall be defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces pollution. The Contractor shall obtain and refer to the California Stormwater Quality Association's: Stormwater Best Management Practice Handbook Portal: Construction. The publication is available from CASQA.

The Contractor shall have a minimum of two (2) readily accessible copies of each publication on the Work site at all times. The Contractor shall implement BMPs in conjunction with the following construction operation and activities:

CONSTRUCTION PRACTICES	Clearing, Grading and Excavating
	Water Conservation Practices
	Dewatering
	Paving Operations
	Structure Construction and Painting
MATERIAL MANAGEMENT	Material Delivery and Storage
	Material Use
	Spill Prevention and Control
WASTE MANAGEMENT	Solid Waste Management
	Hazardous Waste Management
	Contaminated Soil Management
	Concrete Waste Management
	Sanitary/Septic Waste Management
VEHICLE AND EQUIPMENT MANAGEMENT	Vehicle and Equipment Cleaning
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance

The Contractor shall implement the following BMPs in conjunction with the previously listed construction operation activities:

VEGETATIVE STABILIZATION	Scheduling of Planting
	Preservation of Existing Vegetation
	Temporary Seeding and Planting
	Mulching

PHYSICAL STABILIZATION	Geotextiles and Mats
	Soil Stabilizer/Dust Control
	Temporary Stream Crossing
	Stabilized Construction Roadway
	Stabilized Construction Entrance
RUNOFF DIVERSION	Sodding, Grass Plugging, and Vegetative Buffer strips
	Earth Dikes, Drainage Swales, and Lined Ditches
	Top and Toe of Slope Diversion Ditches/Berms
	Slope Drains and Subsurface Drains
VELOCITY REDUCTION	Flared Culvert End Sections
	Outlet Protection/Velocity Dissipation Devices
	Check Dams
	Slope Roughening/Terracing/Rounding
SEDIMENT TRAPPING	Slit Fences
	Straw Bale Barrier
	Sand Bag Barrier
	Brush or Rock Filter
	Storm Drain Inlet Protection
	Sediment Traps
	Sediment Basin

Additional BMPs may be required as a result of a change in actual field conditions, contractor activities, or construction operations. When more than one BMP is listed under each specific BMP category, the Contractor shall select the appropriate and necessary number of BMPs within each category in order to achieve the BMP objective.

BMPs for contractor activities shall be continuously implemented throughout the year. BMPs for erosion control and sedimentation shall be implemented during the period from October 15 to April 15, and whenever the National Weather Service predicts rain within 24 hours. BMPs for erosion control and sedimentation shall also be implemented prior to the commencement of any contractor activity or construction operation that may produce run-off, and whenever run-off from other sources may occur.

The CITY, as a permittee, is subject to enforcement actions by the State Water Resources Control Board, the Environmental Protection Agency and private citizens. The CITY may assess the Contractor a penalty of \$1,000 for each calendar day that the Contractor has not fully implemented the appropriate BMPs and/or is otherwise in noncompliance with these provisions. In addition, the CITY will deduct, from the final payment due the Contractor, the total amount of any fines levied on the CITY, plus legal and staff costs, as a result of the Contractor's lack of compliance with these provisions and/or less than complete implementation of the appropriate BMPs.

Full compensation for the implementation of BMPs, including the construction, removal, and the furnishing of all necessary labor, equipment, and materials, shall be considered as included in the price bid for MOBILIZATION.

**7-8.7 Temporary Light, Power, and Water.** Add the following:

The Contractor shall furnish, install, maintain, and remove all temporary light, power, and water at its own expense. These include piping, wiring, lamps and other equipment necessary for the Work. The Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining permission from the water agency concerned.

The Contractor shall obtain a construction water meter from the CITY by calling Global Water at 855-354-5623. A \$1,000 deposit is required and refundable upon return of the meter in good working condition. The Contractor shall pay for the water used, at the CITY's current water rates.

Some water mains in Torrance are owned/operated by California Water Service. For rental of a hydrant meter the contractor shall call California Water Service at (310) 257-1400.

**7-8.8 Contractor's Storage Yard.** The Contractor shall be responsible for obtaining a storage yard for the duration of the Work. If the proposed location of the yard is located within the boundaries of the CITY, the Contractor shall obtain prior approval from the Engineer.

The City has leased the SCE Right of Way in between the I-405 Freeway and Yukon Avenue. The Contractor may use a 50' x 100' portion of the SCE Right of Way as a storage yard.

**7-8.9 Graffiti Removal.** The Contractor shall maintain the Work, all of its equipment, and all traffic control devices, including signage, free of graffiti throughout the duration of the Contract. The Contractor shall respond to any request from the Engineer to remove graffiti within 4 hours of notification. Should the Contractor fail to respond to such request, the CITY reserves the right to make other arrangements for the requested graffiti removal and deduct the cost from any monies due the Contractor.

## **7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.**

Add the following paragraphs:

The Contractor shall be responsible to protect all new concrete work from being etched, scratched or otherwise marked or having wet slough material deposited thereon. If new concrete work is marked, the Contractor shall replace it at its expense in accordance with 303-5.7 of these special provisions.

The Contractor shall perform all private lawn, hardscape, and parkway restorations, (not included in the project plans) including restoration of irrigation systems and existing curb drains within five (5) days after the adjacent improvements have been constructed at his own expense. The Contractor shall not delay restorations for tree plantings.

Add the following subsections:

**7-9.1 Replacement of Lawns.** When the Contract requires the removal and replacement of lawns or sod, including parkways, the Contractor shall comply with the following minimum requirements: the area to be replanted shall be regraded and covered with two inches of an approved topsoil; the grass seed or sod shall be for grass or sod of the same type as was removed, or an approved equal, and grass shall be sown at the rate recommended by the seed distributing company; Bandini steer manure or approved equal shall be applied to the planted area at the rate recommended by the vendor. The Contractor shall water and care for replaced lawns until the grass has attained a complete cover and has been given its first cutting, unless other arrangements are made with the property owners. The lawn restoration, as above described, shall be completed prior to the final payment.

Topsoil shall be in accordance with 212-1.1.

**7-9.2 Replacement of Sprinkler Systems.** Damaged sprinklers shall be replaced so that the area watered by the original system will be adequately watered by the reconstructed system without undue waste of water. Overspray on any area no longer planted should be avoided, and any revised shape or layout of the remaining planted area will be adequately watered. Any additional material or work required to obtain said adequate coverage shall be furnished by the Contractor, at its expense. The Contractor shall be responsible to replace any lawn or plant damaged from lack of irrigation resulting from the Contractor's operations, at its expense, to the satisfaction of the Engineer.

**7-9.3 Parkway Trees.** The Contractor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs and shall not trim or remove any trees unless such trees have been approved for trimming or removal by the Engineer. All existing trees and shrubs that are damaged during construction shall be trimmed or replaced by the Contractor or a certified tree company to the satisfaction of the Engineer. Tree trimming and replacement shall be accomplished in accordance with the following requirements:

- (a) Trimming. Symmetry of the tree shall be preserved; no stubs, splits torn branches or torn roots left; clean cuts to be made close to trunk or large branch. Spikes shall not be used for climbing live trees. All cuts over one and one-half inches in diameter shall be coated with a suitable tree wound paint as approved by the Engineer.
- (b) Replacement. The Contractor shall immediately notify the Engineer if any tree is damaged by its operations. If, in the opinion of the Engineer, the damage is such that replacement is necessary, the Contractor shall replace the tree at its own expense. The tree shall be of a like variety as the tree damaged, subject to the approval of the Engineer. The size of the tree shall be the size of the tree replaced or 3" in diameter, whichever is smaller.

## **7-10 PUBLIC CONVENIENCE AND SAFETY**

### **7-10.1 Access.**

#### **7-10.1.2 Vehicular Access** Replace the entire subsection with the following

The Contractor's operations shall cause no unnecessary inconvenience. The access rights for the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the Work, or an approved detour shall be provided.

Safe and adequate vehicular access shall be provided and maintained to: fire hydrants; commercial and industrial establishments; churches, schools and parking lots; service stations and motels; hospitals; police and fire stations; and establishment of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the Engineer.

Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access. When the Contractor begins excavation of a residential driveway, safe access shall be provided within 4 hours and not later than the end of the same workday in which excavation began.

Unless otherwise authorized, work shall be performed in only one-half the roadway at one time. One half shall be kept open and unobstructed until the opposite side is ready for use. If one-half a street only is being improved, the other half shall be conditioned and maintained as a detour.

The Contractor shall provide the necessary measures to prevent public access to private residences during removal and replacement of existing barrier structures, such as wood and chain



link fences, during non-working hours.

The Contractor shall be responsible to provide at least 48 hours written notice to each affected property before closing or partially closing any driveway or pedestrian access.

Unless the Contractor makes other arrangements satisfactory to the owners, the Contractor shall provide and maintain safe, adequate vehicular access to places of business and public gathering as stated herein below:

- (a) For each establishment (such as, but not limited to, gas stations, markets, and other "drive-in" business) on the corner of an intersection, which has a driveway (or driveways) on each intersecting street, the Contractor shall provide vehicular access to at least one driveway on each intersecting street insofar as the access is affected by the Contractor's operations.
- (b) For each establishment (such as, but not limited to, motels, parking lots and garages) which has a one-way traffic pattern with the appropriate entrance driveway and exit driveway, the Contractor shall provide vehicular access to the entrance driveway and the exit driveway insofar as the access is affected by the Contractor's operations.
- (c) The Contractor shall provide vehicular access to all schools and parking lots including, but not limited to, apartment building parking lots.
- (d) The Contractor shall provide vehicular access to all establishments requiring such access for receiving or delivering materials or supplies and for delivery of mail.
- (e) The Contractor shall make every reasonable effort to provide maximum access to churches on their Sabbath days. In addition, the Contractor shall not park or store equipment at the site of a church on its Sabbath days.
- (f) At least three (3) days prior to starting work in any location, the Contractor shall distribute written notices to all homeowners and residents that will be impacted by the work. The City will provide the notice.
- (g) The Contractor shall provide a minimum 1-inch thick temporary asphalt surface for an access ramp or sidewalk if it is not able to install the permanent improvement within 5 working days following the removal of the existing material at any location. The offset at any transverse or longitudinal joint shall not be more than one-half (1/2) inch. On the temporary asphalt surface: the running slope shall not exceed 1:20; the cross slope shall not exceed 1:50. The Contractor shall not be allowed any additional compensation for the installation and removal of temporary asphalt.
- (h) The Contractor shall protect the work from traffic. Should the slurry seal be damaged, the Contractor shall provide satisfactory repairs at no cost to the City.

Should any change in these requirements be necessitated by extraordinary occurrences or requirements during the execution of the Work, the Contractor shall obtain prior written approval of the Engineer.

All costs for the above requirements shall be included in the Contract Unit Price for "TRAFFIC CONTROL/ PERMITS".

**7-10.1.3 Pedestrian Access.** Replace the entire subsection with the following:

The Contractor's operations shall cause no unnecessary inconvenience. The access rights for the public shall be considered at all times, unless otherwise approved by the Engineer.

Safe and adequate pedestrian access shall be provided and maintained to: fire hydrants; commercial and industrial establishments; churches, schools and parking lots; service stations and motels; hospitals; police and fire stations; and establishment of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the Engineer.

Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the Work at intervals not exceeding 300 feet, shall be maintained unless otherwise approved by the Engineer.

All costs for the above requirements shall be included in the Contract Unit Price for TRAFFIC CONTROL/ PERMITS.

**7-10.2 Work Area Traffic Control**

**7-10.2.1 General.** City Standards T1001 and T1004 are approved for work in City streets. Traffic Control Plans may be required to obtain Caltrans Permit.

**7-10.2.2 Traffic Control Plan (TCP)** Replace the entire subsection with the following:

If required by Caltrans, the Contractor shall submit a legible, detailed TCP on one or more 24" x 36" reproducible plan sheets which shall clearly show and/or describe all proposed lights, warning signs, barricades, delineators, temporary lane markings, temporary traffic signals or signs, and any and all other facilities proposed to be installed. Said TCP shall be prepared by a Registered Civil and Traffic Engineer and shall show all lane closures, restrictions, tapers and other disruptions of normal traffic flow, including pedestrian and vehicular detours. A schedule and/or sequencing diagram shall be included. Said TCP may be drawn on a sepia or other transparent copy of the Plans. Said TCP shall be submitted to the Engineer for approval no later than two (2) weeks after the award of Contract. It shall be the Contractor's responsibility to immediately revise said Plan at the direction of the Engineer, and the Contractor hereby agrees that such changes shall not constitute a claim for extra work or additional costs. The approved TCP shall be strictly adhered to, and the Contractor hereby understands and agrees that its failure to provide any facility or device as shown on the TCP, or its deviation from said Plan, shall constitute a breach of Contract.

**7-10.2.3 Payment.** Replace entire subsection with the following:

Full compensation for complying with the submittal requirements, furnishing, placing and removing traffic control shall be per the Contract Unit Price for TRAFFIC CONTROL/ PERMITS.

Add the following subsections:

**7-10.2.4 Minimum Requirements for Maintaining Traffic Flow.** The Contractor shall observe the following minimum requirements:

- a) Unless otherwise shown on the Traffic Control Plans, permitted by this Contract or authorized by the Engineer, all roadways, driveways, travel and turning lanes, sidewalks and access ramps shall remain open at all times.

- b) At a minimum, the Contractor shall maintain one (1) ten (10) foot-wide lane open in each direction between the hours of 8:00 a.m. and 4:00 p.m. All travel lanes shall be kept open all other times.
- c) Any travel lane adjacent to the curb and within the work zone shall be, at a minimum, a twelve (12) foot-wide lane.
- d) Reduction in lane requirements may be afforded only with prior written approval from the Engineer.
- e) Traffic signs, flaggers, warning devices, safety traffic devices and, on select streets, electronic arrow boards for diverting and directing traffic shall be furnished, installed and maintained by the Contractor throughout the project.
- f) The Contractor must provide access through the work zone in non-working hours by means of temporary ramps. Open trenches shall either be covered by steel plates, or ramped with crushed miscellaneous base. No drop-off at either transverse or longitudinal joints shall be allowed at any time. Temporary ramps, including those for driveway access, shall be constructed with either crushed miscellaneous base or temporary asphalt, as appropriate, with a minimum of 1" to 12" slope in both longitudinal and transverse directions.

All costs for the above requirements shall be included in the Contract Unit Price for Traffic Control.

**7-10.2.7 Temporary "No Parking" Signs.** The Contractor is responsible to post "Temporary No Parking" signs at least forty-eight (48) hours in advance of the first date of work and the required enforcement. If work is to begin on either a Monday or Tuesday, the Contractor shall post the signs on a Friday. Each sign must include text indicating the beginning and end dates and the hours in effect. "Tow-Away" and "No Parking" must be shown on each sign face. If it is required to temporarily restrict parking 24 hours/day then "Tow-Away" and "No Parking Anytime" must be shown on each sign face. The signs shall be mounted on either 1" x 2" X 3' high wood stakes, Type II barricades, or 39-inch high delineators. Signs shall be spaced at approximately 100' intervals on the effected side(s) of the street. Signs shall not be posted on trees, traffic signal poles, utility poles, street lights, or any other street furniture.

Signs shall be professionally made of moisture-resistant, heavy duty cardboard or other approved material. All signs shall be maintained by the Contractor and kept free of graffiti. Any sign that becomes illegible or is removed shall be replaced within twenty-four (24) hours. The Contractor shall only be permitted to restrict parking for the minimum time necessary to complete on-going work. The Contractor shall be responsible to remove and repost "Temporary No Parking" signs when work will be delayed for more than five (5) consecutive days, or if the work must go beyond the end date shown on the signs, or otherwise directed by the Engineer.

The Contractor shall obtain approval for the signs and the placement thereof from the Engineer. Immediately after this approval and posting, the Contractor shall notify Torrance Police Department, Traffic Division, at (310) 618-5557 for review and enforcement. The parking restriction cannot be enforced until the signs have been in place 48 hours and the Police notified.

The Contractor shall maintain said signs through the day of work, and shall remove all of said signs on or within one (1) calendar day of the completion of work within the restricted parking area.

If, in the event a street scheduled for slurry or cape sealing was missed, the Contractor shall immediately remove all "No Parking" signs and notify all residents and others previously notified, with printed notices, that due to unforeseen circumstances, the Contractor was not able to seal the

street as previously notified, that the street will be rescheduled in approximately 1 to 2 weeks, and that they will be re-notified. The Contractor shall, on the job site prior to the start of each day's work, have an adequate supply of approved letters of notification to residents for missed streets.

Full compensation for furnishing, placing, maintaining and removing temporary signs shall be considered as included in the Contract Unit Price for Traffic Control.

**7-10.2.8 Holiday Moratorium.** No reduction in lane widths on any major street shall be permitted during the CITY's holiday period construction moratorium, which begins on the Monday prior to Thanksgiving and ends on the Friday following New Year's Day. No traffic signal shall be out of operation for any period of time during said moratorium.

**7-10.2.9 Refuse Collection.** Refuse collection days are established and will not be changed. Consult the Engineer regarding the refuse collection schedule. The Contractor shall ensure streets and alleys affected by the work are accessible to the CITY's automated trash trucks on designated pick up days. In alleys, Contractor shall be responsible to provide and maintain access to large trash containers during the course of the work.

**7-10.2.10 Protection of Permanent Pavement Markings, Manholes, Valves.** The Contractor shall, in areas outside of the work zone, protect existing raised pavement markers, thermoplastic legends and markings. The Contractor shall cover and protect existing valve and manhole covers, utility caps, and similar items from damage.

The contractor shall be responsible for replacing or restoring any damaged items to the satisfaction of the Engineer.

Full compensation for the items in this subsection shall be considered as included in the Contract Unit Price for TRAFFIC CONTROL/ PERMITS.

#### **7-10.4 Safety.**

Add the following subsections:

##### **7-10.4.5 Confined Spaces.**

###### **7-10.4.5.1 Confined Space Entry Program (CSEP)**

**7-10.4.5.2 Permit-Required Confined Spaces.** Entry into permit-required confined spaces as defined in CCR, Title 8, Section 5157 may be required as a part of the Work. All catch basins, manholes, tanks, vaults, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Contractor shall prepare and implement a permit space program prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by Contractor and Agency personnel at the Work site.

**7-10.4.5.3 Testing for Safe Atmospheric Conditions.** The Contractor shall continuously test for safe atmospheric conditions in each catch basin. Testing shall be done immediately prior to removing the manhole cover and continuously thereafter while working in the basin. Testing shall verify that safe atmosphere conditions exist in the catch basin. Gas meters shall test for oxygen deficiency or enrichment, flammable gases, hydrogen sulfide, and carbon monoxide. The Contractor shall test the atmosphere of the catch basins using a gas meter that tests for all four gases simultaneously. Instruments shall be "bump checked" at the start of each day to verify calibration.

Testing instruments are available from:

- 1) J.G. Tucker & Son, Inc., 575 E. Edna Place, Covina, CA 91723
- 2) Fisher Scientific, (800) 766-7000
- 3) Lab Safety Supply (800) 356-0783

If unsafe readings are indicated, the Contractor shall use a blower to provide continuous ventilation of the catch basin. Entry shall not be made until readings show no hazardous atmospheric conditions exist.

#### **7-10.6 Street Closures, Detours, Barricades.**

In addition to the requirements of this subsection, the Contractor shall conform to the requirements for street closures, detours, and barricades as stipulated in the Special Provisions. However, deviations from the requirements stipulated in the Special Provisions may be permitted upon written approval of the Public Works Director when such deviations are in the best interest of the City.

The Contractor shall notify the Engineer at least ten (10) working days in advance of closing or partially closing any street or alley and comply with their requirements. In addition, the Contractor shall notify the Torrance Police Department-Traffic Division at (310) 618-5557 and Torrance Fire Department at (310) 781-7042 at least two (2) working days in advance of such closing.

It shall be the Contractor's responsibility to allow passage of the Torrance Transit System coaches through the construction area at all times. The Contractor shall notify the Torrance Transit Department at (310) 618-6266 at least 48 hours prior to construction affecting bus stop zones to allow said Transit System to temporarily abandon and relocate bus stop zones within the construction area.

The Contractor shall immediately notify the above parties upon completion of the construction work and opening or reopening of any street or alley.

The Contractor shall install, maintain, and remove all temporary delineators, barricades, lights, warning signs and other devices necessary to control traffic as specified in the project plans and these specifications. Materials for a temporary facility may be provided from new or used materials. If used materials are provided, they shall be sound, in good condition and otherwise meet the requirements of new materials. All traffic control devices shall be free of graffiti, and the Contractor shall be responsible to immediately clean and/or replace any device to the satisfaction of the Engineer.

Full compensation for furnishing, installing, maintaining and removing the above traffic control devices shall be considered as included in the Contract Unit Price for TRAFFIC CONTROL/PERMITS.

Where streets in which improvements are being constructed are specified hereinafter to be closed to through traffic, it shall be understood that such closures shall apply only to the portions of such streets where construction is actually in progress.

After award of the contract, the Contractor shall submit to the City its proposed Traffic Control Plan as required by the Special Provisions and to comply with the requirements specified herein. This submittal shall be made sufficiently in advance (street closure schedules MUST be submitted ten (10) days prior to closing the affected street) of any rerouting or diversion of traffic by the Contractor to allow for a review of the Contractor's proposed traffic control by the Public Works Director.

The Contractor shall submit to the City Engineer detailed plans prepared by a Registered Civil Engineer of all temporary bridges proposed for use on this project. This includes bridges which may have been used on previous projects. Temporary bridges shall be clearly posted as to load limit, with signs and posting conforming to current requirements covering "signs" as set forth in the Traffic Manual published by the California Department of Transportation. The Contractor shall allow 15 days for approval by the Engineer. The drawings shall indicate specific locations where the bridge is to be used. Bridges shall not be installed until such time as written approval is obtained from, and the bridge is inspected by, the City Engineer.

This manual shall also apply to the street closures, barricades, detours, lights, and other safety devices required, except as modified hereinafter or within the Special Provisions.

The Contractor shall conform to Section 74.6.8 of the Torrance Municipal Code. In addition, the Contractor shall comply with directions from the Engineer to provide protection at excavations, trenches and/or other potentially hazardous construction areas. The Contractor shall be required to erect temporary railing (Type K) per Caltrans Standard Plan T3, five-foot high chain link fences, or equivalent protection, to completely enclose all open excavations over three feet (3') in depth. Fencing shall be approved by the Engineer, and provide adequate security. Fencing may be removed during working hours to the extent necessary to provide access and working room, in which case the Contractor shall provide equivalent security, to the satisfaction of the Engineer, during said periods. Any excavation not secured to the satisfaction of the Engineer shall be completely backfilled prior to the end of each day's construction activities. The Engineer may require additional security devices, lighting or other protection in addition to said fencing. Full compensation for furnishing, placing and removing temporary protection shall be considered as included in the price for the various items of work.

## **SECTION 9 - MEASUREMENT AND PAYMENT**

### **9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.**

#### **9-1.2 Methods of Measurement.** Add the following subsections:

##### **9-1.2.1 Payment for Labor and Materials.**

The Contractor shall pay and cause the subcontractors to pay any and all accounts for labor, including Worker's Compensation premiums, State Unemployment and Federal Social Security payments and all other wage and salary deductions required by law. The Contractor also shall pay and cause the subcontractors to pay any and all accounts for services, equipment and materials used by it and the subcontractors during the performance of work under this contract. All such accounts shall be paid as they become due and payable. If requested by the Engineer, the Contractor shall immediately furnish the City with proof of payment of such accounts.

##### **9-1.2.2 Measurement and Payment**

Payment of each item will include full compensation for furnishing all labor, materials, tools, equipment and backup equipment; transportation and technical competence for performing all work necessary to complete each item as indicated on the plans and as specified in these Contract Documents, including but not limited to obtaining all applicable certifications necessary for specialty personnel and major equipment in conformance with Subsection 7-5, and all other applicable permits; securing a storage yard to store all equipment and materials to be used on the job, disposal of waste materials, restoration of the site, etc. The storage yard may also be used as a temporary storage for excavated materials, and traffic control items. Costs for mobilization/demobilization shall be included in the unit price bid for MOBILIZATION.

### **9-2 LUMP SUM WORK.** Replace the second paragraph with the following:

The Contractor shall, within five (5) working days of receipt of a request from the Engineer, submit a complete breakdown of lump sum bid prices showing the value assigned to each part of the work, including an allowance for profit and overhead. In submitting the breakdown, the Contractor certifies that it is not unbalanced and that the value assigned to each part of the work represents its estimate of the actual cost, including profit and overhead, of performing that part of the work. The breakdown

shall be sufficiently detailed to permit its use by the Engineer as one of the bases for evaluating requests for payment. No extra costs shall be allowed for providing these breakdowns.

### **9-3 PAYMENT.**

#### **9-3.2 Partial and Final Payment.** Replace the third paragraph with the following:

For each progress estimate, 5 percent will be deducted and retained by the CITY, and the remainder less the amount of all previous payments will be paid. In addition, 125% of the amount of unreleased "STOP" Notices will be withheld.

Add the following:

The Contractor shall submit all requests for payment on a Progress Payment Invoice.

Prior to submittal of said invoice, all items for which payment is requested shall be checked and approved in writing by the Engineer. No payments will be made unless all back-up data is submitted with the payment request and the Progress Payment Invoice is signed by both Contractor and Engineer.

#### **9-3.4 Mobilization.** Replace the entire subsection with the following:

Mobilization shall include the provisions of the Construction Schedule, Best Management Practices and Storm Water Pollution Prevention Plan; Emergency Response Plan; site review; obtaining all permits, insurance, and bonds; moving onto the site all plant and equipment; furnishing and erecting plants, temporary buildings, and other construction facilities, and removal of same at completion of the Work; and other work, all as required for the proper performance and completion of the Work.

Mobilization shall include, but not be limited to, the following items:

- (a) Submittal and modification, as required, of the Construction Schedule.
- (b) Moving on to the site of all Contractor's plant and equipment required for the first month's operations.
- (c) Installing temporary construction power and wiring.
- (d) Establishing fire protection system.
- (e) Developing construction water supply.
- (f) Providing on-site sanitary facilities and portable water facilities, as required.
- (g) Arranging for and erection of Contractor's work and storage yard.
- (h) Submittal of all required insurance certificates and bonds, including subcontractors.
- (i) Obtaining all required permits.
- (j) Posting all OSHA required notices and establishment of safety programs.

- (k) Potholing and other research and review as necessary to verify site conditions and utility locations
- (l) Having the Contractor's Superintendent present at the job site full-time.
- (m) Removals, clean up and restoration.

Add the following subsection:

#### **9-3.5 Noncompliance with Plans and Specifications.**

Failure of the Contractor to comply with any requirement of the Plans and Specifications, and/or to immediately remedy any such noncompliance upon notice from the Engineer, may result in suspension of Contract Progress Payments. Any Progress Payments so suspended shall remain in suspension until the Contractor's operations and/or submittals are brought into compliance to the satisfaction of the Engineer. No additional compensation shall be allowed as a result of suspension of Progress Payments due to noncompliance with the plans or specifications. The Contractor shall not be permitted to stop work due to said suspension of Progress Payments.

Add the following section:

#### **9-4 CLAIMS.**

The Contractor shall not be entitled to the payment of any additional compensation for any cause, including any act, or failure to act, by the CITY, or the happening of any event, thing or occurrence, unless the Contractor shall have given the CITY due written notice of potential claim as hereinafter specified.

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the potential claim. Said notice shall be submitted on a form approved by the CITY at least forty-eight (48) hours (two working days) in advance of performing said work, unless the work is of an emergency nature, in which case the Contractor shall notify and obtain approval from the Engineer prior to commencing the work. The Engineer may require the Contractor to delay construction involving the claim, but no other work shall be delayed, and the Contractor shall not be allowed additional costs for any said delay but may be allowed an extension of time if the Engineer agrees that the work delayed is a controlling element of the Construction Schedule. The Contractor shall be required to submit any supporting data (or a detailed written explanation justifying further delay) within five (5) work days of a request from the Engineer and shall be responsible for all costs associated with any delays resulting from late and/or incomplete submittals. By submitting a Bid, the Contractor hereby agrees that this subsection shall supersede 6-6.3 and 6-6.4 of the Standard Specifications.

It is the intention of this subsection that differences between the parties arising under and by virtue of the Contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that it shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was timely filed.



## **PART 2 - CONSTRUCTION MATERIALS**

Add the following section:

### **SECTION 217 - MISCELLANEOUS DRAINAGE FACILITIES**

#### **217-1 CURB OPENINGS AND GRATING CATCH BASINS.**

Modify the subsections to read:

##### **217-1.1 General.**

The work specified in this subsection includes the furnishing and installation of the Automatic Retractable Screens (ARS) for catch basin opening as described herein, into existing storm drain catch basins. These devices are intended to reduce the amount of trash entering the storm drain system through curb opening catch basins or a curb opening catch basin with gratings. All devices shall conform to the following requirements:

1. In curb openings with support bolts, multiple units shall be installed between the existing support bolt(s) to span the entire curb opening width. Each screen shall be hinged independently of the other screens and shall not be attached to any other screen. The maximum clear opening between adjacent screens, adjacent fixed frame members, or between the screens and support bolts shall be 1/2-inch. A maximum of two adjacent screens (units) may be linked and operated by a single mechanism if the vertical internal dimension of the catch basin at the upstream end is not big enough to permit the mechanism to operate the first screen.
2. The existing support bolt(s) shall be protected in place and the operation of the units shall not be hindered by the support bolt(s).
3. The existing horizontal protection bar shall be removed in all curb opening catch basins prior to the installation of an ARS.
4. All parts of ARS units shall be installed as closely as possible to align with the projected curb face.
5. The catch basin opening screen cover may be installed from inside the catch basin and the installation shall be perpendicular to the street surface.
6. All nuts and bolts shall be secured by a liquid industrial hardener such that nuts and bolts may only be removed by heat application.
7. A catch basin opening screen cover frame may form the perimeter of the opening screen cover.
8. The catch basin opening screen covers shall be removable solely by entry into the catch basin. All parts of the screen cover shall be sized to fit through the maintenance hole or curb opening when the unit is disassembled.
9. The catch basin opening screen covers shall have a means to manually open and close them from the street-side and any necessary tools to open screen covers shall be provided to each City.

10. The catch basin opening screen closing-locking mechanism shall be designed to open when the surface street runoff reaches fifty percent (50%) of the curb height measured directly in front of the catch basin curb opening. The catch basin screen cover shall open towards the interior. The closing-locking mechanism shall remain opened as long as the flow depth exceeds 4 inches and gradually return to the lock position as the flow recedes.
11. The catch basin opening screen covers' closing mechanism shall be designed to close/lock at a slow speed to ensure that as the screen cover returns to its original closed perpendicular position that no trash (i.e., plastic bottles, soda cans) will become ensnared between the screen cover and the bottom lip of the catch basin opening.
12. The vertical distance between the screen gate and the upper underside of the curb opening shall be maintained for overflow at two inches (2"), for 6" curb face and 3" for 8" curb face, unless otherwise required by a City. The vertical distance between the screen gate and the lower portion of the curb opening shall not exceed one half inch (1/2"). The horizontal distances between the screen gate and the side walls shall not exceed one half inch (1/2").
13. The placement of any anchoring system to the concrete walls of the catch basin shall be embedded a minimum of three (3") inches. All anchoring sleeves shall be of S-304 stainless steel.
14. The catch basin opening screen cover shall remain in the closed and locked position during periods of no rain. The use of torsion springs as a locking mechanism shall not be allowed.
15. The catch basin opening screen cover shall not have any components, accessories, frames, or brackets within the catch basin that will prevent the installation of vertical catch basin inserts or that inhibit the operation of existing catch basin inserts. No catch basin opening screen cover component shall hang lower than the bottom lip of the catch basin curb opening.
16. No catch basin opening screen cover component shall obstruct the catch basin maintenance opening found on the deck of the catch basin.
17. The bottom horizontal lip of the curb opening catch basin shall not be used as an anchor point for the opening screen cover.

#### **217-1.2 Submittals.**

Prior to initiating fabrication, the Contractor shall submit shop drawings, catalog cuts, and other information required which completely describes the units to be installed under this Contract per Subsection 2-5.3 and as required for Los Angeles Public Works Department permits. The following information shall be included to this submittal for each type of unit:

1. Detailed shop drawings and descriptions of all components of the unit, showing all dimensions, materials used, connection details, assembly details, and mounting details. The shop drawings shall clearly describe the mechanical operation of the unit.

2. Calculations shall be provided with the force diagrams that demonstrate that all parts have been properly sized to develop the necessary forces to operate the various mechanisms that automatically open the screen with the flow of water and keep it open when the catch basin floods, and to keep it closed when subject to a force of 25 lbs. The force diagrams and calculations shall be stamped by a Civil or Mechanical Engineer licensed in the State of California.
3. Installation details and instructions.
4. Warranty information, including contact information for replacement parts.
5. Performance and test data, including a list of existing installations with a contact person from the owner of the facility in which each unit is installed and the date of installation.
6. Recommended cleaning and maintenance schedule and procedures to maintain the proper functioning of the unit, including replacement schedule of parts for the entire unit.
7. Onsite Testing Procedures: Testing procedures in accordance with 217-4.5 for ARS units intended to operate automatically.

#### **217-1.3 Manufacturer's Warranty.**

All devices included in Section 217 of these Special Provisions shall be covered by a three (3) year manufacturer's warranty, from the date of acceptance of the project by the AGENCY, or from the date of actual installation, whichever date is later. The warranty shall cover the devices against corrosion, excessive wearing of moving parts, and operational malfunction for any reason. The manufacturer shall provide, at no cost to the AGENCY, all labor, material and equipment required to repair or replace the devices during the warranty period including, but not limited to, calibration and adjustment of moving parts to ensure the device operates properly. There shall be no limit to the number of claims or number of repairs or replacements required during the warranty period to ensure that the devices operate properly.

#### **217-1.4 Preliminary Inspection and Measurement.**

The Contractor shall inspect each catch basin included in this Contract for unsound conditions such as but not limited to: a) exterior damage, b) bent or missing protection bars, c) damaged manholes, d) damaged face plate, e) other physical damage, f) catch basins requiring protection bars per APWA Standard Plan 310-1. Since these types of conditions may interfere with the installation of retrofit devices, a list of catch basins with such unsound conditions shall be submitted to the Engineer. The list shall also identify catch basins that, based on inspection, the Contractor determines are not suited for the type of device listed in the contract documents.

Any subsequently disclosed damage to a catch basin not included in the list submitted by the Contractor will be assumed to be the result of the Contractor's clean out or installation operations and shall be corrected at the Contractor's expense.

The dimensions shown in the contract documents are approximate and included for bid purposes only. The Contractor shall make detailed measurements of each catch basin for the proper fabrication of the devices. Improper fabrication of devices due to errors in the Contractor's measurements shall be corrected at its own expense. The Contractor shall submit written records of its measurements to the Engineer or as required to obtain Los Angeles County Flood Control

District permits. The Contractor shall identify in the measurement records catch basins that, based on actual measurements, are not suited for the type of device listed in the contract documents.

## **217-2 CLEANING OF EXISTING CATCH BASINS.**

### **217-2.1 General.**

The Contractor shall furnish all materials, equipment, tools and labor to clean out, i.e., remove trash and debris from within and around all catch basins in which retrofit devices will be installed under this Contract to the maintenance standards specified in this subsection. Clean out shall also include the catch basin connector pipe openings. The catch basin shall be clean at the time of the installation of the retrofit device. Any trash and debris that accumulates between the dates the catch basin is cleaned and the date the device will be installed shall be removed prior to installation of the device at the Contractor's expense.

### **217-2.2 Removal and Reinstallation of Catch Basin Manhole Covers.**

The Contractor shall remove the existing manhole cover as required to access the inside of the catch basin and shall reinstall the existing catch basin manhole cover whenever the catch basin is left unattended.

The Contractor's attention is directed to the possibility that the catch basin cover screws may be frozen. It shall be the Contractor's responsibility to remove these frozen cover screws. If during their removal the catch basin covers or screws should become damaged, it shall be the Contractor's responsibility to replace them in accordance with the applicable standard plan and to redrill and tap new holes, if necessary, at no additional cost to the AGENCY. If heat is used to facilitate removal of frozen cover screws, the screws must be checked the following workday to verify that they have not refrozen.

Before leaving a catch basin, the Contractor shall thoroughly clean all debris from the manhole frame and cover. When replacing the catch basin covers, the Contractor shall grease all catch basin cover screws with a high temperature thread lubricant and seal grease (Jet-Lube by Koper-Kote or equal) and shall furnish and replace any missing screws.

### **217-2.3 Maintenance Conditions and Maintenance Standards.**

Following are deficiencies in maintenance conditions and their corresponding maintenance standards which shall apply to this Contract. The clean out of each catch basin shall meet the maintenance standards listed as follows:

<b>Description of Maintenance Condition Deficiency</b>		<b>Description of Maintenance Standard</b>	
1.	Trash and debris located immediately in front of curb opening or side opening of catch basin, and on top or between metal grates of grated catch basin.	1.	No trash and debris located immediately in front of catch basin opening, and on top or between metal grates.
2.	Vegetation growing across and/or blocking	2.	No vegetation blocking catch basin opening.

the basin opening.

- |    |                                                                        |    |                                                                                                                             |
|----|------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------------------|
| 3. | Trash and debris in the basin.                                         | 3. | No trash and debris within the catch basin.                                                                                 |
| 4. | Trash and debris in the connector pipe opening upstream or downstream. | 4. | No trash or debris in connector pipe opening and/or in the connector pipe for a distance of 6 feet inside from the opening. |

Trash and debris shall include, but is not limited to, mud, vegetation, and garbage.

Upon completion of a clean out operation at a catch basin and before leaving it, the Contractor shall sweep and clean the top surface of the catch basin and the area 2 feet around the basin, and shall remove any trash and debris resulting from the clean out operations. No debris is to be left at a catch basin for future pickup.

#### **217-2.4 Method of Removal.**

All debris and trash required to be removed from the catch basins shall be removed in a manner to be determined by the Contractor. The Contractor shall not allow any trash or debris to enter the connector pipe or main line as a result of the clean out operations.

#### **217-2.5 Debris Disposal.**

All debris and trash removed under this Contract shall become the property of the Contractor and shall be legally disposed of away from the catch basin sites. The Contractor is responsible for proper disposal of the debris and trash, including obtaining approvals from all jurisdictional agencies, as applicable. The Contractor shall be responsible for removing any dead animal from inside a catch basin. The Contractor shall also be responsible for contacting and coordinating with the appropriate agency or organization in charge with the pickup and disposal of dead animals.

Prior to the start of the Work, the Contractor shall identify his intended disposal sites. In addition, the Contractor shall furnish to the Engineer at the end of each week the original or copies of all invoices or billings for the disposal of debris. The Contractor is responsible for reporting to the disposal facility, as accurately as practical, the jurisdictional percentage of the debris being disposed. These invoices must indicate the weights or volume of debris disposed.

Vehicles used by the Contractor to transport debris to approved dumpsites shall be so equipped that spillage does not occur. Covering of the load shall be required to prevent the debris from being blown off the transport vehicle. Vehicles and personnel operating these vehicles that do not comply with this requirement may be ordered removed from the project and shall not be utilized again.

#### **217-2.6 Payment.**

Full compensation for furnishing all labor, equipment, and materials for the clean out and disposal of trash and debris from catch basins, including dump fees, shall be considered as included in the other item of work and no separate payment thereof.

Bidders are advised that the quantity of debris located within each catch basin is unknown and, therefore, should be taken into consideration when preparing the bid.

#### **217-4 AUTOMATIC RETRACTABLE SCREENS (ARS).**

##### **217-4.1 General.**

An Automatic Retractable Screen (ARS) prevents trash and debris from entering the catch basin during dry weather and moderate storm flows, thereby maintaining trash and debris within the street to be collected by street sweeping and other equipment. It shall open automatically to restore the curb opening with minimal obstruction when the depth of the storm flow in the street exceeds 3 inches.

The mechanism for automatically opening the screen shall be any mechanism that collects storm water in a container and uses the weight of that water to operate moving parts that cause the screen to open. The following is the Automatic Retractable Catch Basin Screen model and manufacturer accepted by the Los Angeles County Department of Public Works for minimum reduction in Catch Basin Hydraulic Capacity and the Cities:

Model: **Wing Gate**  
Manufacturer: United Storm Water, Inc.  
1400 E. Valley Boulevard  
City of Industry, CA 91746-2801  
Contact: Terry Flury  
(626) 419-3521  
[terry@unitedstormwater.com](mailto:terry@unitedstormwater.com)

Bidders are advised that the listing of devices by name in these Special Provisions does not exclude the device from meeting all requirements of these Special Provisions. There shall be no exceptions to this requirement and acceptance of devices not listed in these Special Provisions shall be at the sole discretion of the Engineer.

##### **217-4.2 Materials and Fabrication.**

1. All components, appurtenances, and accessories of the catch basin openings screen cover shall be of S-304 stainless steel.
2. The catch basin opening screen cover frame shall be manufactured/fabricated from S-304 stainless steel, gauge 12. The structural members shall have a minimum thickness of 3/16 inches. Any mounting brackets that may be used to secure the opening screen cover that are not considered structural members, shall be gauge 10.
3. The catch basin opening screen cover shall be manufactured/fabricated from S-304 stainless steel, gauge 12. The opening screen cover shall have circular openings with a diameter of three quarters (3/4) inch and provide at a minimum fifty percent (50%) open area.
4. The catch basin opening screen cover shall have its outer edges finished as to prevent handling injuries and ensure trash does not become ensnared.
5. The catch basin opening screen cover hinges shall be designed as to prevent slippage/prying off from the street side.

6. The concrete anchor bolts shall be 3/8" wedge anchor, and assembly bolts, screws, nuts, and washers shall be fabricated entirely from S-304 stainless steel.
7. An integrated closing-locking mechanism shall be provided on the catch basin opening screen cover that does not solely rely on magnets and/or springs as its locking mechanism.

#### **217-4.3 Installation and Removal.**

The screen mounting brackets shall be welded to the existing catch basin faceplate assembly or bolted to the concrete walls and soffit of the catch basin. Any faceplate assembly damaged during installation shall be replaced. All parts of the unit shall be sized to fit through the 24-inch diameter manhole when the unit is disassembled.

#### **217-4.4 Operation.**

The screens shall open and close automatically with variations in water flow. All screens shall swing fully open under maximum flow conditions, remain open as long as the flow depth exceeds 50% of the curb height, and return to the mechanically locked and closed position as the flow of water recedes.

Any buckets or containers that collect water as part of the automatic mechanism shall be self-draining and be equipped with a means for preventing the bucket from collecting debris that will weigh the bucket down and prevent the screen from automatically closing after the flow of water recedes.

Each unit shall be equipped with a mechanism that maintains the screen fully open if the water rises in the catch basin and impedes the operation of the mechanism that operates the screen (i.e., causes the bucket to float, reduces impact forces, etc.).

#### **217-4.5 Onsite Test.**

Each unit shall be manually operated upon completion of the installation to ensure that the screen and all moving parts move freely and the screen locks securely in the closed position. Units that are determined by the Engineer to be malfunctioning shall be repaired or replaced at the sole expense of the Contractor.

The Engineer will randomly select 25 percent of the catch basins in each City in which ARS units were installed for testing using water supplied from a fire hydrant or water truck. The Contractor shall be responsible for providing the source of water, including obtaining a hydrant construction meter from the water agency if a hydrant is used. Sufficient water shall be provided to cause the ARS units to open with no other assistance as follows:

1. Sandbags shall be placed around the catch basin opening to allow the water to pond in front of the catch basin to a depth of 3 inches, measured from the flow line of the catch basin opening. The sandbags shall be located 5 feet upstream and downstream of the end of the local depression. Sandbags shall also be placed 7 feet from and parallel to the curb face.
2. An impermeable rigid membrane/barrier shall be placed covering the catch basin opening to allow the water to pond in front of the catch basin. The membrane/barrier shall be capable of sealing the catch basin opening without leakage so that the water ponds to the depth required.

3. Once the water reaches the depth described herein, the impermeable membrane shall be removed in one quick and continuous motion to allow the ponded water to instantaneously enter the catch basin and cause the ARS to open. A continuous flow of water shall be provided for at least two minutes after the initial opening of the ARS units in sufficient quantity to maintain the unit open. At the end of the two minutes, the flow of the water shall be stopped and the unit shall close and lock automatically prior to or immediately after the flow into the catch basin stops.
4. This process shall be successfully completed at least two consecutive times without adjustments and/or calibration between trials.

Any units that do not open, close, and lock closed automatically under the test conditions, described herein, shall be repaired or replaced at the sole expense of the Contractor and re-tested. This process shall be repeated until the failed unit passes the test at the sole expense of the Contractor. If more than five of the units tested do not open as described above and require re-testing, the Engineer will select at his/her sole discretion additional catch basins to be tested at no additional cost to the AGENCY. The final adjustments shall be made on other catch basins that have similar configuration as the test catch basin.

#### **217-4.6 Payment.**

The Contract Unit Price, categorized by range in width of the existing catch basin opening, for ARSs shall be considered full compensation for furnishing and installing all the units required to span the entire width of the existing catch basin opening including all labor, materials and equipment for the cleaning of catch basins, installation, submittals, costs associated with the 3-year warranty, onsite testing and calibration, and all other costs involved in the Work not specifically covered by other items of work.

The Contractor shall note that some of the catch basins shown on the contract documents do not receive ARS units. Only those marked and identified. But due to the limited funding the AGENCY has the option to delete a location(s) of a catch basin in the contract documents.

Full compensation for furnishing all labor, equipment, and materials for the testing of ARS units shall be considered as included in the Contract Unit Price for the applicable items in the bid. No additional payment will be made for compliance with these testing requirements.

#### **217-5 FLO-GARD® + PLUS CATCH BASIN FILTER INSERTS.**

The Flo-Gard® + Plus, manufactured by KriStar Enterprises Inc., or approved equal, shall be pre-approved by Los Angeles County Flood Control District. Contractor shall provide shop drawings as required for Los Angeles County Flood Control District.

Filter inserts shall have both an "initial" filtering bypass and "ultimate" flow bypass feature. The filter support frame shall be constructed from stainless steel Type 304. Allow a minimum of 2.0 feet of clearance between the bottom of the grate and top of outlet pipe(s), or refer to the FloGard® Insert for "shallow" installations. Filter medium shall be *Fossil Rock*™, installed and maintained in accordance with manufacturer specifications. Storage capacity reflects 80% of maximum solids collection prior to impeding filter bypass. Filtered flow rate includes a safety factor of two.

Add the following section:



## **SECTION 218 – SIGNS.**

### **218-2 NO PARKING SIGNS.**

**General.** “No Parking” signs for street sweeping are required to maximize the effectiveness of the ARS units. Most streets in the City of Torrance do not have “No Parking” signs. The hours to be posted on the “No Parking” signs are described in the Street Route Maps available on the City of Torrance website at <http://www.torranceca.gov/1879.htm> .

#### **218-2.1 Sign Specifications.**

The Contractor shall furnish and install “No Parking” street sweeping signs with days and times to be provided by the Engineer and as follows:

- Size: signs shall be 12"x18"; supplemental placards shall be 12" x 6".
- Text: Red with “TORRANCE” on the bottom border
- Arrows: Red
- Materials: 0.080" aluminum with 3M, diamond grade cubed, with protective overlay film 1160 and hole punched
- Warranty: matched component system warranty of 12 years

#### **218-2.2 Post Specifications.**

The Contractor shall provide and mount signs to posts as follows:

##### **U-Channel Posts:**

- U Channel posts shall be Hot rolled flanged channel produced from high strength rail steel according to ASTM A499-81, Grade 60. Dimensions = 3-1/8" x 1.516"
- Length: 12 feet
- Weight: 2 pounds per linear foot
- Holes: 3/8" diameter on one-inch centers punched full length, beginning 1" from top of post
- Finish: Hot dipped galvanization per ASTM-A-123

##### **Square Tube Posts:**

- Square Perforated Steel Tube Post shall be two piece Anchor and Sleeve and shall be made of hot dipped galvanized (inside and outside) steel square tube by “Telespar” or approved equal.
- The 2 piece anchor and sleeve assembly shall consist of a 2-1/4" square by 30" (through sidewalk) or 36" (through soil) anchor with a 2-1/2" square by 18" sleeve. All sleeves and anchors shall be 12 gauge.
- The anchor and sleeve assemblies shall be driven simultaneously until only 4" remains aboveground level.
- All dirt shall be removed from the inside top 6" min. of the anchor assembly to allow for installation of the sign post.
- Install the 2" square sign post minimum 6" into the anchor assembly and secure in place with two 3/8" drive rivets. The rivets shall be installed on the side facing traffic flow and the side of approaching traffic as shown in order to achieve the maximum break-away effect. No bolt-through securing methods will be allowed.
- Installation according to these requirements is essential to maintain the break-away characteristics of the post system. Under no circumstances shall the anchor assembly be secured in concrete.

- Caps, brackets, cross-saddles to accommodate street name signs, etc. Caps shall be 2" square x 12" aluminum. Cross-saddle shall be 12" aluminum to fit street signs.
- Length: 12 feet.
- Holes: 7/16" diameter  $\pm$  1/64" diameter on one-inch centers, punched on all four sides for the entire length of the pole. The holes shall be on the centerline of each side in true alignment and opposite each other directly and diagonally. All posts shall be cut in such a manner to ensure hole alignment between anchors and sleeves when installed.
- Finish: Hot dipped galvanization per ASTM-A-123
- Weight: 2.416 pounds per linear foot

General:

- The bottom of the lowest sign on the post shall be a minimum of 7 feet above the finished surface, except when placed in turf parkway and approved by Engineer.
- Anchor assemblies shall be core drilled through pavement (concrete, asphalt, paver, etc.) as required.
- All signs attached to perforated posts shall have zinc coated or stainless steel washers behind the rivet that are larger than the head of the rivet.
- The finished posts shall be straight and shall have a smooth uniform finish. All holes and ends shall be free from burrs and ends shall be cut square. Permissible variation in the straightness is one-sixteenth of an inch in three feet.

### **218-2.3 Bracket and Strap Set Specifications.**

Signs mounted to existing street poles shall use brackets as follows:

- Buckles (2 per set): 3/4" stainless steel buckle, Band It Inc. part no. BU 256 or ISO equivalent
- Brackets (2 per set): Stainless Steel, 3/4" slot flared leg bracket, stainless steel bolt, stainless steel washer, and fiber washer, Band It Inc. part no. D02189 or ISO equivalent part no. SB021
- Straps (2 per set): Stainless Steel band, 3/4" wide and 0.025" thick, Band It Inc. part no. BU256 or ISO equivalent

Mounting Set Hardware shall be as follows:

- Drive Rivets must be 3/8" or approved equal, Stainless Steel (2 rivets minimum required per post/anchor assembly).
- Nut (2 per set): 5/16"x2"; Zinc-plated steel (back face mounting)
- Washer (2 per set): 5/16"; nylon (front face mounting)
- Washer (2 per set): 5/16"; zinc-plated steel (back face mounting)
- Aluminum cap post bracket must be 2" square cap with 12" saddle to fit street signs.
- Aluminum cross-saddle bracket must be 12" sign hardware holding brackets or approved equal. Must be manufactured to fit street sign blades. Field verify.

### **218-2.4 Installation Specifications.**

Installation should be in ground at depth necessary to hold the sign firmly in place with a minimum depth of 24". Sign placement will be guided by the locations identified in the plans. As much as possible, actual sign locations will be on the property line, if a new pole is being installed. Signs will be targeted to be placed between the curb and sidewalk with a targeted lateral offset of 0.6 m (2 ft) from the curb and a minimum lateral offset of 0.3m (1 ft) from the face of the curb. Bracket installation requires a screw mounting or other method to the bracket to ensure that the sign may be replaced on the existing bracket without removing the bracket.

**Marbelite Street Light Pole Sign Installation:**

- 1) The minimum vertical clearance shall be 7' to the bottom of the lowest sign on the "Marbelite" street light pole.
- 2) The sign shall be banded to the flat surface of the Marbelite that best accommodates a 90° angle to the coming traffic unless otherwise specified.
- 3) The band shall be tightened to a point at which it does not break, yet prevents movement by hand of the sign, band or bracket.
- 4) All signs being banded to Marbelite street light pole shall have no less than 2 bands (upper and lower). Any sign larger than 36" shall have 3 bands (upper, middle and lower).
- 5) Under no circumstances shall the bands cover the identification tag on the Marbelite street light pole.
- 6) Installation of 2 or more signs on a single post shall not overlap. Signs should have a 1" gap between each sign.

**218-2.5 Payment.**

The Contract Unit price for installing "No Parking" signs shall include all costs for identifying sign locations, USA markings for new posts, materials, installation and removal of USA markings.

Contractor shall make provisions to utilize 1,420 surplus 12-foot long U-channel posts stored at City Yard. Full compensation for loading and transporting the City-supplied U-channel posts from City Yard to jobsite location shall be considered as included in the Contract Unit Price for FURNISH AND INSTALL NEW STREET SWEEPING "NO PARKING" SIGNS AND **CITY-PROVIDED** U-CHANNEL POSTS IN LANDSCAPE.

**SECTION 317 - SIGNAGE**

**317.1 ROADSIDE SIGNS.** All signs shall be installed in accordance with the requirements of Section 56-4 of the Caltrans Standard Specifications, Caltrans Standard Plans and these Special Provisions. Roadside signs shall be installed at the locations shown on the Plans or where directed by the Engineer.

All signs shown on the signing and striping plans shall be new signs provided and installed by the contractor, except for existing signs specifically indicated to be relocated or to remain. Relocated signs must be relocated on the same day that the sign is removed.

All signs shall be of 3M Diamond Grade Cubed, with 1160 protective anti-graffiti overlay film and matched components system warranty (12 years) on 0.080 Aluminum with "Torrance" and year on border.

Delete the entire subsection 56-2.05.

**56-4.03 CONSTRUCTION.** Delete the third paragraph and last sentence of the eleventh paragraph.

**56-4.04 PAYMENT.** Replace the entire subsection with the following:

Payment for roadside signs shall be per unit per the Contract Unit Price and shall include all labor, materials, tools, equipment, and individuals, and for doing all the work involved in furnishing and installing roadside signs, complete in place, as shown on the Plans and these Special Provisions, and as directed by the Engineer.

**APPENDIX I**

**CITY OF TORRANCE PUBLIC WORKS AGREEMENT**

**PERMIT AND BUSINESS LICENSE**

**APPENDIX II**  
**CITY OF TORRANCE STANDARD PLANS**

## **APPENDIX III**

### **LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS ARS STANDARDS AND PERMIT APPLICATION**